Original

RECEIVED

JUN - 5 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

ALLTEL SERVICE CORPORATION
1710 Rhode Island Ave. NW • Suite 1000 • Washington, DC 20036
Telephone: 202-331-0113 Facsimile: 202-331-0082

June 5, 1992

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street NW, Room 222
Washington, DC 20554

RE: In the Matter of Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies (ET Docket No. 92-9)

Dear Ms. Searcy,

Enclosed for filing on behalf of the ALLTEL Companies are an original and nine copies of our Comments in the above referenced proceeding.

Should there be any questions concerning this matter, please contact the undersigned counsel.

Sincerely,

Carolyn C. Hill

/rf
Enclosures

No. of Copies rec'd 049
List A B C D E

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Redevelopment of Spectrum to	)	
Encourage Innovation in the	)	ET Docket No. 92-9
Use of New Telecommunications	)	
Technologies	)	

Comments of the ALLTEL Companies

The ALLTEL local exchange telephone companies and the cellular affiliates of ALLTEL Mobile Communications, Inc. (hereinafter the ALLTEL Companies) respectfully submit their comments in response to the Notice of Proposed Rulemaking (NPRM)[1] in the above-captioned proceeding.

Introduction

The telephone company subsidiaries of ALLTEL Corporation serve more than 1.2 million access lines in twenty-five states. ALLTEL Mobile is a rapidly growing affiliate which provides cellular service in most of those 25 states.

The ALLTEL Companies will be directly impacted by the Commission's instant rulemaking because of their usage of 2 GHz to provide their authorized services. The ALLTEL telephone companies, particularly those in the western and southwestern part of the

[1] Notice of Proposed Rulemaking (ET Docket 92-9, FCC 92-20), adopted January 16, 1992, and released February 7, 1992.

United States, use 2 GHz frequencies at 110 sites to provide reliable telecommunications services over great distances on a cost effective basis. ALLTEL Mobile also uses 2 GHz frequencies to connect various cellular radio cell sites with the Mobile Telephone Switching Office ("MTSO") in various MSAs and RSAs in the south and midwest. Because of our present and planned use of 2 GHz frequencies, the ALLTEL Companies are vitally interested in the outcome of this proceeding.

The Commission adopted this NPRM in an effort to make spectrum available for the development of new services and technology. Specifically, the NPRM seeks to migrate certain existing users out of the 1.85-2.20 GHz band and free this spectrum for new services. ALLTEL supports the Commission's desire to promote new services and technologies and recognizes the critical role that spectrum availability plays in the development of these innovations. Nevertheless, ALLTEL urges the Commission to proceed in a manner that fully preserves the capabilities and investment of existing 2 GHz band users such as the ALLTEL Companies.

Cost and Feasibility of Relocation

The Commission suggests in the NPRM that private and common carrier fixed microwave operations using the 2 GHz band can be relocated to higher frequency bands or use alternatives such as fiber, cable and satellite communications.[2] In this regard, it is important to keep in mind the considerations which lead the ALLTEL Companies to select the 2 GHz band for usage in the first instance;

[2] Notice, Para. 17.

namely, that it permitted the provision of economic and reliable communications services. Thus, a move to either a higher frequency or alternative technology presents operational problems (such as increased fading) and costs (such as the need for more expensive radios and the addition of ancillary equipment to include antennas, wave guides, etc.) that should not be underestimated. ALLTEL Mobile estimates a cost of approximately $125,000 to $250,000 per cell site to make the equipment modifications and replacements necessary to move, for example, from 2 GHz to 6 GHz. Engineering requirements necessary to maintain technical reliability affect these costs. 6 GHz paths may, in some cases, require additional relay sites or route repeaters to adequately transmit over the same distance as a 2 GHz signal. Larger microwave dishes may have to be utilized for 6 GHz transmission which may cause tower loading problems.

The ALLTEL telephone companies would also face similarly high changeout costs. The ALLTEL telephone companies presently have 110 sites designed for 2 GHz use. Conversion of these sites to 6 GHz or other frequencies would cost millions of dollars.

Not only are the costs of reengineering and vacating the 2 GHz band considerable for the ALLTEL Companies, but the use of higher frequency equipment increases costs as well. For instance, the ALLTEL Companies estimate an additional cost of $50,000 to $100,000 per site if required to use the more expensive equipment necessary for the 6 GHz band.

Use of alternative technologies is often even more costly. The use of fiber in lieu of a 2 GHz facility by the ALLTEL telephone companies would, in many instances, cost approximately $400,000 more per site.

In view of the enormity of these costs and their impact on customers who rely on these services, the Commission should seek to avoid dislocation of incumbent telephone and cellular companies. If migration is required however, the Commission should, at a minimum, adopt a phase-in period sufficient to permit recovery of investment and minimize waste (at least 15 years). No restrictions should be placed on the ability of present users to negotiate with replacement licensees for acceptable terms and recovery of all projected costs including, but not limited to, equipment, engineering, training, licensing, frequency coordination, test equipment and tower alterations.

Technical requirements also complicate the transition from 2 GHz to higher frequencies. For example, most of our present 2 GHz licenses and many of our new applications will not meet the minimum loading requirements of the higher frequency bands. The rural nature of our service areas that currently utilize the 2 GHz frequencies will simply not provide sufficient traffic to meet the Commission's existing minimum loading and path distance requirements for the higher frequencies. For this reason, the Commission should clarify that any waiver of the eligibility requirements for higher frequency migration should include a waiver of the channel loading and path distance requirements. New

applications by cellular and telephone providers who previously would have utilized the 2 GHz band should also be exempted from these requirements.

The Commission Should Not Prematurely Determine Primary or Secondary Licensees.

The NPRM proposes a three step transition plan that (1) permits continued grant of applications for fixed operations in the proposed new technologies bands but will grant applications for facilities submitted after the adoption date of the Notice on a secondary basis only; (2) allows currently licensed 2 GHz fixed licensees to continue to occupy 2 GHz frequencies on a co-primary basis with new services for a fixed period of time and (3) after such time presumes licensees could use these frequencies only on a secondary basis. Since there is no clear indication as to what the new services will be that use this spectrum, the Commission should not arbitrarily relegate existing users to co-primary or secondary status. To do so would indicate a belief that these future services are of greater value than those uses or services provided by existing licensees. From ALLTEL's perspective, the 2 GHz frequencies used by the ALLTEL companies are of great value. (As the Commission is aware, this opinion is shared by other fixed users as well.) For this reason, ALLTEL would object to secondary status for existing or future licenses without knowing considerably more about the prospective primary licensees.

The Commission Should Consider Spectrum From Other Sources.

The Commission tentatively concludes that, in order to avoid the need for coordination and to speed the process of transition,

the new bands should come entirely from spectrum regulated by the FCC.[3] While the Commission understandably wants to move forward expeditiously, opportunities to minimize disruption and dislocation should be actively pursued. This includes working with other government bodies to make available suitable spectrum. To the extent that Congress or NTIA can be helpful in freeing up spectrum for new services and avoid the costly and inefficient transfers that this proposal may require, the Commission should work closely with them to do so. The burden of coordination would be more than compensated for by the problems avoided.

Conclusion

The ALLTEL Companies commend the Commission for its efforts to ensure that spectrum is available for the development of new services and technologies. Indeed, the ALLTEL Companies support the Commission's goal. However, as pointed out herein, the Commission has not yet defined what these new services and technologies are and any required usage migrations can have definite costs and service impacts. Accordingly, the ALLTEL Companies urge the Commission to exhaust available avenues for spectrum relief with NTIA and the Congress before adopting any rule changes.

Respectfully submitted on behalf
of the ALLTEL Companies,

By: _____ _____
Carolyn C. Hill Diane Smith

1710 Rhode Island Ave NW Suite 1000
Washington, DC 20036
(202) 331-0113

Their Attorneys

[3] Para. 10.

Certificate of Service

I, Carolyn C. Hill, do hereby certify that on this 5th day of June, 1992, copies of the foregoing comments of the ALLTEL Companies have been served on the following.

Mr. Fred Lee Thomas
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, NW, Room 7338
Washington, DC 20554

Carolyn C. Hill

June 5, 1992